

## SEMICONDUCTOR LASER

Patent Number: JP60086887  
Publication date: 1985-05-16  
Inventor(s): KUME MASAHIRO; others: 05  
Applicant(s): MATSUSHITA DENKI SANGYO  
Requested Patent:  JP60086887  
Application: JP19830195656 19831019  
Priority Number(s):  
IPC Classification: H01S3/18  
EC Classification:  
Equivalents:

### Abstract

**PURPOSE:** To surely obtain the monitor current by a method wherein a photoelectric conversion element is irradiated with parts of the forward outgoing light of a laser element by a half mirror.

**CONSTITUTION:** A heat-radiating block 5 is installed on a metal stem 4 having lead wires 1-3; a semiconductor laser element 6 and a photoelectric conversion element 7 are adhered to the heat-radiating block 5; and the semiconductor laser is sealed by covering with a metal container 11 having a glass plate 10. Moreover, a half mirror 12 is provided between the laser element 6 and the glass plate 10, both of which are in the metal container 11. The outgoing light of the laser element 6 is outputted through the half mirror 12 and the glass plate 10, and at the same time, parts of the outgoing light are reflected by the half mirror 12 and are incided in the photoelectric conversion element 6. By such a way, the monitor current can be surely obtained.

Data supplied from the **esp@cenet** database - I2



(19)

(11) Publication number:

61

Generated Document.

## PATENT ABSTRACTS OF JAPAN

(21) Application number: **58195656**(51) Int'l. Cl.: **H01S 3/18**(22) Application date: **19.10.83**

(30) Priority:

(43) Date of application publication: **16.05.85**

(84) Designated contracting states:

(71) Applicant: **MATSUSHITA ELECTRICAL LTD**(72) Inventor: **KUME MASAHIRO  
HAMADA TAKESHI  
SHIMIZU YUICHI  
ITO KUNIO  
WADA MASARU  
TAJIRI FUMIKO**

(74) Representative:

### **(54) SEMICONDUCTOR LASER**

(57) Abstract:

**PURPOSE:** To surely obtain the monitor current by a method wherein a photoelectric conversion element is irradiated with parts of the forward outgoing light of a laser element by a half mirror.

**CONSTITUTION:** A heat-radiating block 5 is installed on a metal stem 4 having lead wires 1~3; a semiconductor laser element 6 and a photoelectric conversion element 7 are adhered to the heat-radiating block 5; and the semiconductor laser is sealed by covering with a metal container 11 having a glass plate 10. Moreover, a half mirror 12 is provided between the laser element 6 and the glass plate 10, both of which are in the metal container 11. The

outgoing light of the laser element 6 is outputted through the half mirror 12 and the glass plate 10, and at the same time, parts of the outgoing light are reflected by the half mirror 12 and are incided in the photoelectric conversion element 6. By such a way, the monitor current can be surely obtained.

COPYRIGHT: (C)1985,JPO&Japio

